



13. (Twice Amended) A method for identifying a gene that modifies the function of a gene encoding an SREBP pathway protein comprising obtaining a first *C. elegans* defined by Claim 1 and a second *C. elegans* that has the same genetic engineering as the first *C. elegans* and that additionally has a mutation in a gene of interest, and detecting a difference between the intestinal defect phenotype of the first *C. elegans* and the intestinal defect phenotype of the second *C. elegans*, wherein a difference in the phenotypes identifies the gene of interest as capable of modifying the function of the gene encoding said SREBP pathway protein.

22. (Twice Amended) An isolated nucleic acid molecule of less than 15 kb comprising a nucleic acid sequence that (a) hybridizes to SEQ ID NO:1 under conditions comprising hybridizing in a buffer comprising 6X SSC / 25% formamide at 42°C and washing in a buffer comprising 0.5XSSC at 60°C, and (b) encodes a functionally active SREBP polypeptide having at least 80% sequence identity with amino acids 1-1113 of SEQ ID NO:2, said identity being determined by using the WU-BLAST-2.0a19 program and calculating the number of matching identical amino acids divided by the sequence length of SEQ ID NO:2.

23. (Twice Amended) The isolated nucleic acid molecule of Claim 22 that comprises SEQ ID NO:1.

34. (Amended) The *C. elegans* of claim 1 wherein the SREBP pathway protein is SREBP (SEQ ID NO:2).

35. (Amended) The *C. elegans* of claim 1 wherein the SREBP pathway protein is SCAP (SEQ ID NO:94).

36 (Amended) The *C. elegans* of claim 1 wherein the SREBP pathway protein is S2P (SEQ ID NO:95).

Please cancel claims 3, 4, 6, 8-11, and 15 without prejudice.